

Abstract

An amplifier including a first input for a first at least two input signals having mutually distinct wavelengths, a first output for a first at least two output signals, the first at least two output signals having said mutually distinct wavelengths, a first circulator including an input port coupled to the first input, an output port coupled to the first output, and an intermediate port coupled to a first end of a selective reflection circuit, and, a second circulator including an intermediate port coupled to a second end of the selective reflection circuit, an output port coupled to a first selective splitter, and an input port coupled to a second selective splitter, wherein the first selective splitter and the second selective splitter are centered about a first selected wavelength amongst the mutually distinct wavelengths.